

Serial No.: 09/361,734  
Art Unit: 2615  
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**Amendments to the Claims:**

This listing of claims replaces all prior versions, and listings, of claims in this application.

**Listing of Claims:**

1. (Currently Amended) An audio signal processing circuit for an audio reproduction apparatus at least having sound source located substantially at left and right sides to a listener, comprising:

a phase difference control portion which receives a left channel signal for the left sound source and a right channel signal for the right sound source, controls a phase difference between the left and right channel signals so as to produce a relative phase difference in the range of 140 degrees to 160 degrees, and outputs the phase difference controlled left and right channel signals for the left and right sound source, respectively,

wherein said left sound source and said right sound source are positioned substantially same distances from the listener such that the produced relative phase difference in the range of 140 degrees to 160 degrees occurs at the location of the listener.

2. (Original) An audio signal processing circuit according to claim 1, wherein the phase difference control portion produces the relative phase difference of 140 degrees to 160 degrees in a frequency region ranging from 200 Hz to 1 kHz.

3. (Currently Amended) A surround audio reproduction apparatus having a left and a right channels in front of a listener and a left and a right surround channels at left and right sides with respect to the listener, comprising:

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a phase difference control portion which receives a left surround channel signal and a right surround channel signal, controls a phase difference between the left and the right surround channel signals so as to produce a relative phase difference in the range of 140 degrees to 160 degrees, and outputs the phase difference controlled surround left and right channel signals for a left and a right surround sound source, respectively,

wherein said left sound source and said right sound source are positioned substantially same distances from the listener such that the produced relative phase difference in the range of 140 degrees to 160 degrees occurs at the location of the listener.

4. (Original) A surround audio signal processing circuit according to claim 3, wherein the left and the right surround sound sources are a virtual sound source produced by a sound image localization processing.

5. (Original) A surround audio signal processing circuit according to claim 3, wherein the phase difference control portion produces the relative phase difference of 140 degrees to 160 degrees in a frequency region ranging from 200 Hz to 1 kHz.

6. (Currently Amended) An audio reproduction method at least utilizing sound source located substantially at left and right sides to a listener, comprising the steps of:

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controlling a phase difference between a left channel signal for the left sound source and a right channel signal for the right sound source so as to produce a relative phase difference in the range of 140 degrees to 160 degrees; and outputting the phase difference controlled left and right channel signals for the left and right sound source, respectively,

wherein said left sound source and said right sound source are positioned substantially same distances from the listener such that the produced relative phase difference in the range of 140 degrees to 160 degrees occurs at the location of the listener.

7 – 16. (Canceled)

17. (Previously Presented) An audio signal processing circuit according to claim 1, wherein the phase difference control portion is a monophonic phase difference controller.

18. (Previously Presented) A surround audio reproduction apparatus according to claim 3, wherein the phase difference control portion is a monophonic phase difference controller.

19. (Previously Presented) An audio reproduction method according to claim 6, wherein the phase difference is controlled by a monophonic phase difference controller.